In the Claims:

1. (Currently amended) The digital half-duplex communication device, including:

a scalable digital vocoder;

a scalable channel coder; [and]

the scalable digital vocoder and the scalable channel coder being controlled by a supporting protocol that transmits predetermined digital audio quality and predetermined audio output bit rate information at regular intervals to the digital half-duplex communication device; and

wherein the predetermined digital audio quality and predetermined audio output bit rate information are transmitted by allocating extra bits in a reverse channel.

2. (Canceled) The digital half-duplex communication device of claim 1, wherein the predetermined digital audio quality and predetermined audio output bit rate information are transmitted by allocating extra bits in a reverse channel.

3. (Original) The digital half-duplex communication device of claim 1, wherein the communication device comprises a digital two-way radio.

4. (Currently amended) A communication system, comprising:

a transmitting device providing a supporting protocol that transmits bit error rate (BER) information at regular intervals to a receiving device;

the receiving device, including:

a speech coder;   .

a channel coder; and

the channel coder and speech coder output bit rates are derived from the BER

information; wherein

the BER information is transmitted by allocating extra bits in a reverse channel.

5.   (Original) A digital two-way radio, including:

a digital vocoder having a scalable output bit rate; and

an adaptive channel coder to adjust the output bit rate according to one of bit error rate

and channel error conditions.

6.   (Original) A method for coding audio in a two-way radio having a channel coder

and a speech coder, including:

receiving an audio signal;

generating a variable speech bit rate and a variable channel bit rate; and

applying the variable speech bit rate and the variable channel bit rate to the channel coder

and speech coder at regular intervals so as to approximate a predetermined relationship between

audio quality and range.

7.   (Original) The method of claim 6, wherein the step of applying further

comprises:

applying the variable speech bit rate and the variable channel bit rate to the channel coder

and speech coder at regular intervals so as to approximate a continuous linear relationship

between audio quality and range.

8.   (Original) The method of claim 6, wherein the step of applying further

comprises:

applying the variable speech bit rate and the variable channel bit rate to the channel coder

and speech coder at regular intervals so as to approximate a continuous stepped relationship

between audio quality and range.

9.   (Currently amended) A method for coding audio in a two-way radio having a

channel coder and a speech coder, comprising the steps of:

receiving an audio signal;

determining the bit error rate (BER) of the audio signal;

generating a variable speech bit rate and a variable channel bit rate from the BER;

scaling the speech coder with the variable speech bit rate;

scaling the channel coder with the variable channel bit rate; and

controlling the variable speech bit rate and the variable channel bit rate on the basis of bit

error rate (BER) of the received audio signal that is received in a reverse channel.

10.   (Currently amended) A method for coding in a two-way digital radio, comprising

the steps of:

receiving an audio signal at a vocoder;

scaling the vocoder output;

scaling a channel coder output based on the vocoder output;

controlling the output bit rate of the speech coder and channel coder on the basis of

message error rate/bit error rate (MER/BER) information of the received signal;

transmitting quality requirement information to a transmitting device in a reverse

channel; and

generating scalable speech coder and channel coder frames.

11.   (Original) A digital half-duplex radio, comprising a receiver receiving signaling

frames containing a bit error rate (BER), the receiver utilizing the BER for selectively

controlling a radio frequency (RF) power output and source coding bit rate for the digital radio.

12.   (Currently amended) A digital radio, comprising:

a receiver receiving signaling frames containing a bit error rate (BER), the receiver

utilizing the BER for selectively controlling a radio frequency (RF) power output and source

coding bit rate for the digital radio; and

when the source coding bit rate is selected:

the BER being mapped to generate speech coder and channel coder steps;

the radio further comprising:

a transmitter adjusting for forward error correction (FEC) and speech coding rate

in response to the speech coder and channel coder steps; and

the receiver predicting the FEC and speech coding format from the BER sent in a

[previous] reverse signaling frame.

13.   (Currently amended) A digital two-way radio, including:

a digital speech coder scaled to provide an audio quality that varies linearly with audio

quality measurements computed at a receiver [end], the audio quality being mapped according

to variable length channel coding and variable length source coding rate received in a reverse

channel;

an adaptive channel coder having an adjustable output bit rate; and

a supporting protocol that transmits bit rate information at regular intervals to a supporting

communication device.